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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,399	03/16/2001	Howard B. Goldman		3582

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04/09/2003

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EXAMINER

NGUYEN, THU V

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 04/09/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/809,399

Applicant(s)

GOLDMAN, HOWARD B.

Examiner

Thu Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☒ Claim(s) 13-19 and 21-26 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

The amendment filed on January 16, 2003 has been considered. By this amendment, claims 1-26 are now pending in the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13-19, 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (specification page 9, lines 5-24; page 10, lines 1-22) in view of Bunyan et al (U.S Patent No. 6,248,393).

As per claim 13-14, Applicant admitted prior art teaches a GPS antenna which includes stacked ground, positive and separator plate (specification page 9, lines 5-9).

Applicant's admitted prior art does not disclose engaging the exposed face of the positive plate by a polymeric composition containing particles of a conductive metal. However, Bunyan suggests surrounding electromagnetic surrounding device with a gasket formed of conductive polymer (col.1, lines 28-35; col.5, lines 47-51; col.6, lines 29-53); Bunyan, further, teaches

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bonding or fastening the gasket to the surfaces of the protected device (col.1, lines 35-47; col.5, lines 10-18). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to encase the positive plate, the separator plate and the ground plate of the antenna of the applicant's admitted prior art with the gasket of Bunyan in order to insulate the antenna from interfering with other electromagnetic sources, and to confine the electromagnetic energy as motivated by Bunyan in col.1, lines 28-35.

As per claims 15-17, the internal structure of a GPS antenna would have been known.

As per claim 18-19, 25, Bunyan does not explicitly teach a specific material for the polymeric and conductive metal as claimed. However, Bunyan teaches certain typical materials to be selected for the gasket having polymeric and metal surface (col.5, lines 36-50; col.6, lines 29-53); further, a metal composed of magnesium carbonate, and a non-conductive material including an epoxy would have been a well known conductive/non-conductive materials. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the magnesium carbonate, since selecting a specific known material for a conductive metal device according to a particular need requires only routine skill in the art.

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As per claim 21-24, and 26, applicant's admitted prior art in view of Bunyan do not explicitly disclose an exterior surface as claimed. However, selecting a specific outer surface to facilitate mounting an antenna to a selected position requires only routine skill in the art.

Response to Arguments

The IDS submitted on March 16, 2001 (paper no.2) is not considered because although the PTO 1449 was submitted, the disclosed references were not submitted as required under rule 37 CFR 1.98 (a) (2).

Newly submitted IDS on January 16, 2003 (paper no.5) is accepted and considered. A copy of the PTO-1449 (paper no.5) with examiner's initials is enclosed herein.

3. Applicant's arguments filed January 16, 2003 have been fully considered but they are not persuasive.

In response to applicant's argument on page 3, third paragraph, several details including "*an electromagnetic signal collecting antenna*", "*patch*" antenna improved by surrounding it with a *polymeric composition containing a random dissociated suspension of conductive particles*" are not disclosed in the independent claims. They, therefore, are considered irrelevant.

In response to applicant's argument on page 3, last paragraph, and page 4, line 1, and first paragraph, independent claim 13 does not show any detail that can provide an opposite effect from Bunyan's teaching.

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Applicant's argument with respect to claims 19 in combination of claim 20 is persuasive, claim 18, however, does not teach the component of the polymeric material. The teaching of claim 25 would have been obvious to an ordinary person skilled in the art, since manufacturing non-conductive polymeric material with epoxy would have been well known, and selecting a well known non-conductive polymeric material according to a desired flexibility and toughness requires only routine skill in the art.

Applicant's argument on page 4, last paragraph, and page 5-6 is persuasive, claims 1-12 are allowed over prior arts of record.

Allowable Subject Matter

4. Claims 1-12 are allowed over prior arts. However, in claim 1, line 9, the claimed "said positive plate" should be corrected to "said positive plates".

5. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is an examiner's statement of reasons for allowance:

prior arts of record does not disclose a system for tracking a mobile vehicle including a GPS antenna capable of receiving electromagnetic signal for an orbiting satellite, the GPS antenna includes stacked ground and positive plates separated by a separator, the positive plates having an exposed face engaged by a polymeric composition containing particles of a conductive

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metal; the GPS antenna is connected to a GPS electromagnetic signal processor implemented underside a vehicle, the GPS antenna sends GPS signals identifying geographic location of the vehicle to the GPS signal processor; the GPS signal processor and the GPS antenna is constructed and connected as taught in the independent claim 1; the antenna having the specific structure set forth in the claim with the exposed face of the positive plates being engaged a polymeric composition containing particles of a conductive metal the antenna is meant to receives GPS signals sent from an orbiting satellite when the antenna is not mounted in direct line of sight orientation with the GPS orbiting satellite . Prior art of record, further, does not teach the material of the polymeric composition with particles of conductive metal set forth in the combination of claim 19 and 20, with the combined materials, the specific materials engaged on the positive plates of the GPS antenna would allow receiving GPS electromagnetic signals from a satellite even when the GPS antenna is not installed in direct line of sight orientation with the GPS electromagnetic signals.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-7687, (for formal communications; please mark "EXPEDITED
PROCEDURE")

Or:

(703) 305-7687 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

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Hand-delivered responses should be brought to Crystal Park V, 2451 Crystal Drive, Arlington. VA., Seventh Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (703) 306-9130. The examiner can normally be reached on Monday-Thursday from 8:00 am to 6:00 pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski, can be reached on (703) 308-3873. The fax phone number for this Group is (703)305-7687 .

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)308-1113.



Thu Nguyen

March 12, 2003